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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,812	06/27/2003	Andrew D. Milligan	13768.783.87	8393
47973 7590 11/14/2007 WORKMAN NYDEGGER/MICROSOFT 1000 EAGLE GATE TOWER 60 EAST SOUTH TEMPLE SALT LAKE CITY, UT 84111			EXAMINER PONIKIEWSKI, TOMASZ	
			ART UNIT 2165	PAPER NUMBER
			MAIL DATE 11/14/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/607,812

Applicant(s)

MILLIGAN ET AL.

Examiner

Tomasz Ponikiewski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-16, 17-27 and 28-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/27/2007 has been entered.

2. The Amendment filed on 8/27/07 has been received and entered. Claims 2, 41-43 have been canceled. Claims 1, 3-16, 17-27 and 28-36 are pending.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The applicant in claims 1, 17 and 28 point out that user enters the identification and relationship data. The specification does not mention that user enters this data. The specification states that the client provides the information necessary to find the requested information.

Claim Rejections - 35 USC § 103

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-36 and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carson et al. (US PUB 2004/0093326 A1) in view of Copperman et al. (U.S. 6,711,585 B1) and further in view of Szabo (US 7,181,438 B1).

As per claim 1 Carson et al is directed to a computing environment that includes a network connected client and server database with services organized in a taxonomy, a method for the server database to obtain web service information for one or more web services represented at different nodes in the taxonomy, the method comprising:

receiving a request for web service information, the request including user entered identification data and relationship data, the user entered identification data identifying a specified web service represented at a specified node within the taxonomy, the specified web service having been specified by a computer user, and the user entered relationship data identifying at least a first and a second specified hierarchical relationship wherein the relationship data indicates that any related web service having first or second specified hierarchical relationship with the specified web service is a related web service of interest to the user (page 3, paragraph 0025; page 4, paragraph 0032, lines 4-5; page 7, paragraph 0071; page 7, paragraph 0072, lines 6-7; page 7, paragraph 0074, lines 2-4);

querying one or more databases in a plurality of different taxonomies located on one or more different computer systems using the identification data and the relationship data to obtain web service information for web services having at least one of the first and the second specified hierarchical relationship with the specified web service, the web service information configured for ("configured for" is intended use) presentation in a hierarchical format, the hierarchy being based on the specified web service's hierarchical relationship with other web services nodes in the plurality of different taxonomies, the nodes of each database comprising at least one of a plurality of root nodes (figure 2A; page 6, paragraph 0056, lines 8-9; page 7, paragraph 0068, page 7, paragraph 0070, lines 3-10);

receiving web service information that corresponds to any related web services having at least one of the first and the second specified hierarchical relationships with the specified web service in response to the query, the received web service information including the specified web service and at least one related web service being displayable in a navigable taxonomy (figure 2a; page 3, paragraph 0025, lines 3-5; page 5, paragraph 0048; page 7, paragraph 0068); and

returning the received web service information to the client, the received web service information for graphical presentation at the client to show a user relevant portions of any of the plurality of taxonomies that included related web services having at least one of the first and the second specified hierarchical relationships with the specified web service (page 5, paragraph 0048).

Carson et al. does not explicitly teach relationship data.

Carson et al. teaches inherently that a tree structure has a defined relationship between parent nodes and child nodes as any hierarchical structure does. However Copperman et al. teaches relationship data (Copperman et al., column 30, lines 66-67; column 31, lines 1-16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Carson et al. by teachings of Copperman et al. to include relationship data because the tags help user in refining the request (Copperman et al., column 30, lines 64-65).

Carson et al. as modified still does not teach web service being displayable in a navigable taxonomy.

Szabo teaches web service being displayable in a navigable taxonomy (Szabo, column 17, lines 19-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further combine the Carson et al. as modified by teachings of Szabo to web service being displayable in a navigable taxonomy because the user has a choice of navigating to the desired service.

Carson et al. as modified still does not teach the web service information configured for presentation in a hierarchical format the hierarchy being based on the

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specified web service's hierarchical relationship with other web services nodes in the plurality of different taxonomies.

Szabo teaches teach the web service information configured for presentation in a hierarchical format the hierarchy being based on the specified web service's hierarchical relationship with other web services nodes in the plurality of different taxonomies (Szabo, column 69, lines 14-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further combine the Carson et al. as modified by teachings of Szabo to include the the web service information configured for presentation in a hierarchical format the hierarchy being based on the specified web service's hierarchical relationship with other web services nodes in the plurality of different taxonomies because the format shows the user a path to the requested information.

As per claim 3 Carson et al. as modified is directed to the identification data comprises an identifier of a taxonomy and the relationship data indicates a root node relationship, and wherein returning the web service information in response to the request comprises returning an identifier of at least one root node within the taxonomy (Carson et al., page 2, paragraph 0010, lines 6-14).

As per claim 4 Carson et al. as modified is directed to returning the web service information in response to the request comprises identifying the relationship along with

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each other node identifier that corresponds to the relationship data (Carson et al., page 2, paragraph 0010, lines 6-14).

As per claim 5 Carson et al. as modified is directed to the identification data comprises an identifier of a taxonomy and a node identifier of a node within the taxonomy, and wherein returning the web service information in response to the request comprises returning at least one other node identifier that corresponds to the relationship data (Carson et al., page 7, paragraph 0073, lines 2-7).

As per claim 6 Carson et al. as modified is directed to the relationship data indicates a parent relationship (Carson et al., figure 2a, wherein retrieval (244) is parent of healthcare(261)).

As per claim 7 Carson et al. as modified is directed to the relationship data indicates a child relationship (Carson et al., figure 2a, wherein healthcare (261) is child of retrieval (244)).

As per claim 8 Carson et al. as modified is directed to returning the web service information in response to the request comprises returning an identifier of another taxonomy (Carson et al., page 7, paragraph 0068, lines 10-12).

As per claim 9 Carson et al. as modified is directed to returning the web service information in response to the request further comprises returning at least one node identifier corresponding to at least one node in another taxonomy (Carson et al., page 7, paragraph 0068, lines 7-10).

As per claim 10 Carson et al. as modified is directed to the relationship data indicates an equivalence relationship (Carson et al., figure 2a wherein healthcare (261) and banking (260) are on the same level in the taxonomy).

As per claim 11 Carson et al. as modified is directed to returning the web service information in response to the request further comprises returning at least one attribute value that indicates whether a node corresponding to that attribute value comprises a classification node (Carson et al., page 7, paragraph 0072, lines 3-6).

As per claim 12 Carson et al. as modified is directed to returning the web service information in response to the request further comprises returning at least one text string (Carson et al., page 5, paragraph 0048, second column, lines 9-10).

As per claim 13 Carson et al. as modified is directed to the request includes at least one other set of identification data and relationship data, and wherein the response returns data corresponding to the request in the order in which the identification data and relationship data was received such that the first set of

identification data and relationship data corresponds to a first part of the response and the at least other set of identification data and relationship data corresponds to a second part of the response. (Carson et al., page 7, paragraph 0068; page 7, paragraph, 0073, lines 1-4).

As per claim 14 Carson et al. as modified is directed to the request comprises an XML message, and wherein returning the web service information in response to the request further comprises formatting the response as an XML message (Carson et al., page 4, paragraph 0040, lines 5-7, wherein transportation could mean both request and response).

As per claim 15 Carson et al. as modified is directed to the web service information corresponds to a taxonomy maintained at a UDDI server (Carson et al., page 1, paragraph 0003, lines 6-8; page 7, paragraph 0068, line 1; "a taxonomy" has been introduced previously in claim 1).

As per claim 16 Carson et al. as modified is directed to a recordable-type computer-readable medium having computer-executable instructions configured to execute the method of claim 1 in computer system (see rejection for claim 1, Carson et al., page 5, paragraph 0044, lines 5-7).

As per claim 17 Carson et al is directed to a computing environment that includes a network connected client and server database with services organized in a taxonomy, a method for the network connected client to obtain web service information for one or more web services represented at different nodes in the taxonomy, the method comprising:

constructing receiving a request for web service data regarding one or more related web services, the request including user entered identification data from which a specified web service represented at a specified node within the taxonomy is identifiable and user entered relationship information that identifies at least a first and a second specified hierarchical relationship, wherein the relationship data indicates that any related web service having first or second specified hierarchical relationship with the specified web service is a related web service of interest to the user (page 3, paragraph 0025; page 4, paragraph 0032, lines 4-5; page 7, paragraph 0071; page 7, paragraph 0072, lines 6-7; page 7, paragraph 0074, lines 2-4);

communicating with the server (page 5, paragraph 0048, second column, lines 4-7; page 5, paragraph 0049, lines 12-20);

receiving a response from the server regarding the requested web service data including the identification data regarding the specified web service and relationship information (figure 2a; page 3, paragraph 0025, lines 3-5; page 5, paragraph 0048; page 7, paragraph 0068); and

graphically displaying web service information that corresponds to any related web services having at least one of the first and second specified hierarchical relationships with the specified web service in a navigable taxonomy configured to show a user relevant portions of any of the plurality of taxonomies that included related web services having at least one of the first and the second specified hierarchical relationships with the specified web service (page 5, paragraph 0048).

Carson et al. does not explicitly teach relationship data.

Carson et al. teaches inherently that a tree structure has a defined relationship between parent nodes and child nodes as any hierarchical structure does. However Copperman et al. teaches relationship data (Copperman et al., column 30, lines 66-67; column 31, lines 1-16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Carson et al. by teachings of Copperman et al. to include relationship data because the tags help user in refining the request (Copperman et al., column 30, lines 64-65).

Carson et al. as modified still does not teach graphically displaying web service information

Szabo teaches teach graphically displaying web service information (Szabo, column 17, lines 19-34; Szabo, column 69, lines 14-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further combine the Carson et al. as modified by teachings of

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Szabo to include the graphically displaying web service information because the format shows the user a path to the requested information.

Carson et al. as modified still does not teach web service being displayable in a navigable taxonomy.

Szabo teaches web service being displayable in a navigable taxonomy (Szabo, column 17, lines 19-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further combine the Carson et al. as modified by teachings of Szabo to web service being displayable in a navigable taxonomy because the user has a choice of navigating to the desired service.

As per claim 18 Carson et al. as modified is directed to the identification data comprises a unique identifier and the relationship qualifier indicates a root node relationship with the taxonomy, and wherein the response includes information about at least one root node in the taxonomy (Carson et al., page 7, paragraph 0070, lines 7-8).

As per claim 19 Carson et al. as modified is directed to the identification data further includes node identification data from which a node within the taxonomy is operable to be identified (Carson et al., page 7, paragraph 0070, lines 1-3; page 7, paragraph 0071, lines 1-3).

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As per claim 20 Carson et al. as modified is directed to the relationship qualifier indicates a parent node of a node identified by the node identification data, and wherein the response includes information about the parent node (Carson et al., page 7, paragraph 0074, line 2).

As per claim 21 Carson et al. as modified is directed to the relationship qualifier indicates a child node of a node identified by the node identification data, and wherein the response includes information about at least one child node, if any exist (Carson et al., page 2, paragraph 0010, lines 6-14, wherein the child node is in a level below one mentioned in request).

As per claim 22 Carson et al. as modified is directed to the relationship qualifier indicates an equivalent node of a node identified by the node identification data (Carson et al., page 2, paragraph 0010, lines 6-14, wherein the equivalent node is in on the same level as one mentioned in request).

As per claim 23 Carson et al. as modified is directed to receiving the response from the server further includes receiving an attribute value that indicates whether a node in the taxonomy is intended as a classification node (Carson et al., figure 3 (30); page 7, paragraph 72).

As per claim 24 Carson et al. as modified is directed to receiving the response from the server further includes receiving at least one text string that corresponds to a node in the taxonomy (Carson et al., page 5, paragraph 0048, second column, lines 9-10).

As per claim 25 Carson et al. as modified is directed to constructing a request for taxonomy data comprises constructing an XML message (Carson et al., page 4, paragraph 0040, lines 5-7).

As per claim 26 Carson et al. as modified is directed to communicating the request to a server comprises sending the XML message to a UDDI server (Carson et al., page 1, paragraph 0003, lines 6-8; page 4, paragraph 0040, lines 5-7; page 7, paragraph 0068, line 1).

As per claim 27 Carson et al. as modified is directed to a computer-readable medium having computer-executable instructions configured to execute the method of claim 17 in a computer system (see rejection for claim 17, Carson et al., page 5, paragraph 0044, lines 5-7).

As per claim 28 Carson et al. is directed to in a computing environment that includes a network connected client and server database with services organized in a

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taxonomy, a system that obtains web service information for one or more nodes in a taxonomy, the system comprising:

a client, the client including an application program that presents web service data using received web service data regarding one or more specified web services represented at a specified node, the web service data including information about at least a portion of the web services represented in the taxonomy in a hierarchical format, the hierarchy being based on the web service's relationship with other web services in the taxonomy, the received taxonomy the received taxonomy data including user entered identification information regarding a web service corresponding to the identification data and user entered relationship information corresponding to a relationship qualifier identifying at least a first and second specified hierarchical relationship, wherein the relationship data indicates that any related web service having either the first or second specified hierarchical relationship with the specified web service is related web service of interest to the user (page 3, paragraph 0028, lines 3-4; page 3, paragraph 0027, lines 3-6; page 7, paragraph 0071; page 7, paragraph 0072, lines 6-7; page 7, paragraph 0074, lines 2-4); and

a server that maintains web service data, the server configured to receive web service requests including user entered identification data and relationship data from the client seeking identification information according to the specified web service represented at the node and relationship information that indicates any related web services having at least one of the first and second specified hierarchical relationship with the specified web service, and in response to each request, to locate the related

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web services corresponding to the specified web services in the taxonomy and to return a response to the client the response including the specified web service and at least one related web service being graphically displayable in a navigable taxonomy configured to show a user relevant portions of any of the plurality of taxonomies that included related web services having at least one of the first and the second specified hierarchical relationships with the specified web service (figure 2A; page 6, paragraph 0056, lines 8-9; page 7, paragraph 0068, page 7, paragraph 0070, lines 3-10).

Carson et al. does not explicitly teach relationship data.

Carson et al. teaches inherently that a tree structure has a defined relationship between parent nodes and child nodes as any hierarchical structure does. However Copperman et al. teaches relationship data (Copperman et al., column 30, lines 66-67; column 31, lines 1-16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Carson et al. by teachings of Copperman et al. to include relationship data because the tags help user in refining the request (Copperman et al., column 30, lines 64-65).

Carson et al. as modified still does not teach graphically displaying web service information

Szabo teaches teach graphically displaying web service information (Szabo, column 17, lines 19-34; Szabo, column 69, lines 14-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further combine the Carson et al. as modified by teachings of

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Szabo to include the graphically displaying web service information because the format shows the user a path to the requested information.

Carson et al. as modified still does not teach web service being displayable in a navigable taxonomy.

Szabo teaches web service being displayable in a navigable taxonomy (Szabo, column 17, lines 19-34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further combine the Carson et al. as modified by teachings of Szabo to web service being displayable in a navigable taxonomy because the user has a choice of navigating to the desired service.

As per claim 29 Carson et al. as modified is directed to the relationship information corresponding to the node in the specified taxonomy comprises a root qualifier (Carson et al., page 2, paragraph 0010, lines 6-14).

As per claim 30 Carson et al. as modified is directed to the relationship information corresponding to the node in the specified taxonomy comprises a parent qualifier (Carson et al., figure 2a, wherein retrieval(244) is parent of healthcare(261)).

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As per claim 31 Carson et al. as modified is directed to the relationship information corresponding to the node in the specified taxonomy comprises a child qualifier (Carson et al., figure 2a, wherein healthcare(261) is child of retrieval(244)).

As per claim 32 Carson et al. as modified is directed to comprising a database in which the server maintains the taxonomy data (Carson et al., page 6, paragraph 0056, lines 8-9).

As per claim 33 Carson et al. as modified is directed to the web service requests from the client comprise XML messages (Carson et al., page 4, paragraph 0040, lines 5-7, wherein transportation could mean both request and response).

As per claim 34 Carson et al. as modified is directed to the response to the client comprises an XML message (Carson et al., page 4, paragraph 0040, lines 5-7, wherein transportation could mean both request and response).

As per claim 35 Carson et al. as modified is directed to the server comprises a UDDI server (Carson et al., page 1, paragraph 0003, lines 6-8; page 7, paragraph 0068, line 1).

As per claim 36 Carson et al. as modified is directed to the client provides the request to the server by calling an application programming interface, the application

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programming interface formatting the request as a message for communicating with the server and returning the response to the client in response to the application programming interface call (Carson et al., page 5, paragraph 0049, lines 11-12).

Response to Arguments

5. Applicant's arguments filed 8/27/07 have been fully considered but they are not persuasive.

As per applicant's argument that Carson et al., Copperman et al. nor Szabo teach querying one or more databases is not found persuasive.

Carson et al. shows on page 7 paragraphs 0066-0070 that various identifies are used to find various services that are available to access.

As per applicant's argument that Carson et al., Copperman et al. nor Szabo teach returning the received web service information to the client is not found persuasive.

Carson et al. shows on page 5, paragraph 0048, second column lines 7-10 an example of returned result. Further page 5 paragraph 0049, lines 12-20 show services that are consumable by the user and are part of a solution which is viewable by a user.

Szabo also provides result to a user in column 17, lines 19-34 wherein the client can select any level in the information hierarchy.

Conclusion

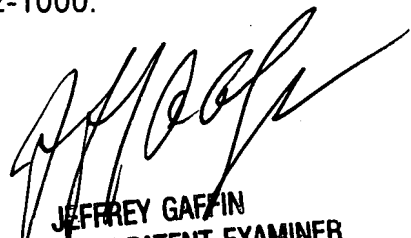
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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tomasz Ponikiewski whose telephone number is (571) 272-1721. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on (571)272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tomasz Ponikiewski
November 13, 2007



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